

**III. AMENDMENTS TO THE DRAWINGS:**

The attached sheet of drawings includes changes to Figure 1. This sheet, which includes Figure 1, replaces the original sheet including Figure 1. In Figure 1, the label "PRIOR ART" has been added. In addition, the steps "(A)," "(B)," and "(C)," have respectively been relabeled as steps --(A)--, --(B)--, and --(C)--.

Attachment:           One Replacement Sheet  
                          One Annotated Sheet Showing Changes

#### **IV. REMARKS**

As an initial matter, Applicants remind the Examiner that the Office Action mailed October 10, 2007 replaces the previously defective Office Action mailed September 7, 2007 (See Examiner's Interview Summary, dated September 19, 2007). Applicants also remind the Examiner of the telephone interview the Examiner conducted on November 2, 2007 with Applicants' representative, Wesley Ashton, wherein the Examiner confirmed that the statutory time period respond to the outstanding Office Actions of September 7, 2007 and October 10, 2007 has been reset to toll from the date of the October 10, 2007 Office Action. In view of the above, Applicants need only address the arguments set forth by the Office Action mailed October 10, 2007.

Applicants gratefully acknowledge the Examiner's determination that claims 2-13 contain allowable subject matter (Office Action, dated October 10, 2007, at 7, lines 17-20).

By the present amendment, the specification has been amended to incorporate the subject matter of Preliminary Amendment (A), of record, and to amend the specification in accordance with changes made to Figure 1. Figure 1 has been amended to label it "PRIOR ART" in accordance with MPEP § 608.02(g). Figure 1 has also been amended to re-label steps "A," "B," and "C" as steps --A1--, --B1--, and --C1--, respectively.

Claims 2 and 3 have been cancelled without prejudice, and claims 4-12, 14 and 15 have been amended. Specifically, independent claim 1 has been amended to improve grammar and form, which is not a reason relating to patentability. Therefore, these amendments as to form and grammar have no further limiting effect on the scope of independent claim 1. Independent claim 1 has also been amended to incorporate the subject matter of claims 2 and 3. Therefore, independent claim now has the same scope as original claim 3.

Claims 4-12 have been amended to improve grammar and not for a reason related to patentability. Therefore, the present amendment has no further limiting effect on the scope of claims 4-12. Claims 4-8 have been amended to depend upon claim 1, which also has no further limiting effect on the scope of these claims.

Independent claims 14 and 15 have been amended to improve grammar and form, which is not a reason relating to patentability. Therefore, these amendments as to form and grammar have no further limiting effect on the scope of independent claims 14 and 15. Claims 14 and 15 have also been amended to incorporate subject matter from original claims 2 and 3. The preamble of independent claim 15 has additionally been amended to recite “a computer readable medium comprising a program stored thereon for numerical analysis of a flow field of incompressible viscous fluid, directly using V-CAD data, wherein the program causes a computer to perform the steps of” as supported on page 22, lines 8-22, and on page 23, lines 10-16, of Applicants’ specification as originally filed.

The present amendment adds no new matter to the above captioned application.

**B. The Rejection**

Claims 2 and 7 stand rejected under 35 U.S.C. § 112, second paragraph, as incomplete.

Claim 15 stands rejected under 35 U.S.C. § 101 for being directed to non-statutory subject matter.

Claims 1, 14 and 15 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Hirt et al. (C. W. Hirt et al., *Volume of Fluid (VOF) Method for the D Free Boundaries*, 39 J. COMPUT. PHYSICS 201-225 (1981), hereafter the “Hirt Article”) in view of Kela (Ajay Kela, *Hierarchical Octree Approximations for Boundary Representation-Based Geometric Models*, 21 COMPUTER AIDED DESIGN 355-362 (1989), hereafter, the “Kela Article”).

Applicants respectfully traverse the Examiner's rejections and request reconsideration of the above-captioned application for the following reasons.

**C. Applicants' Arguments**

In view of the present amendment, claims 1 and 4-15 are now in compliance with 35 U.S.C. § 112. With respect to claim 7, Applicants point out that equations (12) and (13) clearly define the "drag force" and the "lift force." Therefore, the Examiner's contention, (Office Action, dated October 10, 2007, at 3, lines 10-13), that claim 7 fails to "describe existence of drag and lift force terms" is incorrect on its face.

In view of the present amendment, independent claim 15 now recites "a computer readable medium comprising a program stored thereon for numerical analysis of a flow field of incompressible viscous fluid, directly using V-CAD data, wherein the program causes a computer to perform the steps of," which clearly recites statutory subject matter falling squarely within the scope of 35 U.S.C. § 101.

With respect to the Examiner's Section 103(a) rejection, independent claims 1, 14 and 15 now incorporate allowable subject matter from original claims 2 and 3. Therefore, the present claims are allowable over the art of record for the reasons of record.

**III. CONCLUSION**

In view of the present amendment, claims 1 and 4-15 are in compliance with 35 U.S.C. § 112. Also, independent claim 15, which now recites "a computer readable medium comprising a program stored thereon" pertains to statutory subject matter falling squarely within 35 U.S.C. § 101. Therefore, the Examiner's Section 101 rejection should be withdrawn.

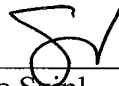
The Examiner's rejection under 35 U.S.C. § 103 based on the combination of the Hirt Article and the Kela Article is untenable and must be withdrawn because independent claims 1, 14 and 15 now incorporate allowable subject matter from original claims 2 and 3.

For all of the above reasons, claims 1 and 4-15 are in condition for allowance and a prompt notice of allowance is earnestly solicited.

The below-signed attorney for Applicants welcomes any questions.

Respectfully submitted,

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